

Central Pacific Transcontinental Railroad, Tunnel 26
(Applegate Crossing)
Southern Pacific Donner Pass Route Tunnels
Milepost 133.29
Applegate vicinity
Placer County
California

HAER No. CA-202

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Western Region
Department of the Interior
San Francisco, CA 94107

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HISTORIC AMERICAN ENGINEERING RECORD

CENTRAL PACIFIC TRANSCONTINENTAL RAILROAD, TUNNEL 26 (Applegate Crossing)

HAER No. CA-202

Location: Southern Pacific Donner Pass Route Tunnels
Milepost 133.09, Applegate vicinity, Placer County, California

UTM: 10-673760-4317255
Quad: Greenwood, Calif. 7.5', 1949 (photorevised 1973)
(west portal)

UTM: 10-673820-4317330
Quad: Greenwood, Calif. 7.5' 1949 (photorevised 1973)
(east portal)

Date of Construction: 1909.

Engineer: Southern Pacific Railroad Engineering Department.

Present Owner: Union Pacific Railroad, 1416 Dodge Street, Omaha NE 68101.

Present Use: Railroad Tunnel.

Significance: The Central Pacific First Transcontinental Railroad is a segment of the western half of the first transcontinental railroad, built from Sacramento, California to Promontory Summit, Utah between 1863 and 1869, where it joined the Union Pacific Railroad which had built west from Omaha. For the purpose of the current project, the first transcontinental railroad was found likely to be eligible for the National Register of Historic Places at the national level of significance under Criterion A for its significance in transportation history, in uniting the East and the West, and in the development of the West. The railroad's period of significance is 1869 to 1945, from the line's completion in 1869, through the years of its role in the settlement and development of the West, to the conclusion of the railroad's achievements in World War II. Tunnel 26 is a contributive element of this property.

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I. DESCRIPTION

Tunnel 26 is a 60-foot, single track railroad tunnel, with reinforced concrete portal faces and wingwalls, and granite ashlar voussoirs and portal coping. As-built, the tunnel was unnumbered and was referred to as the Applegate Crossing. The tunnel is on a tangent (no curve) alignment, and carries the tracks of the Union Pacific Railroad's (formerly Southern Pacific) Donner Pass line.

II. HISTORICAL INFORMATION

Contractors, Utah Construction Company of Ogden built Tunnel 26 (originally unnumbered) in 1909 as an element of the reconstruction and double-tracking of the original Central Pacific line between Rocklin and Colfax. [For a full history of this line and of this undertaking, see the documentation set for the Central Pacific Transcontinental Railroad (Southern Pacific Overland Route) (Southern Pacific Donner Pass Route), Southern Pacific Donner Pass Route Tunnels, HAER No. CA-196.] After assuming control of the Southern Pacific/Central Pacific and merging them with the Union Pacific in 1901, Edward H. Harriman had embarked on a series of huge reconstruction projects system-wide. One of these was the double-tracking of the original Central Pacific line over Donner Pass, the first segment of which was from Rocklin to Colfax. In connection with this, Harriman also moved the roundhouse and locomotive shop facilities originally built at Rocklin by the Central Pacific, to nearby Roseville where he built a much larger and more modern facility to handle the larger locomotives he was bringing onto the system.

Two contracting firms divided the work, with Utah Construction Company building the portion from Colfax west to Clipper Gap, and Erickson & Petterson handling the work from Rocklin east to Clipper Gap. All the tunnels, whether single- or double-track, conformed to Southern Pacific Common Standard plans.

Just east of Tunnel 25 (HAER CA-201), the old Central Pacific line was on an embankment; the new line, thirty feet below this grade, had to pass below the old without disrupting rail traffic. Utah Construction Company carried out this construction using a cut-and-cover method. First they built a temporary timber pile trestle below the old line. Where the piles interfered with the placement of the arch and wingwalls of the new tunnel, crews built boxes around them; after pouring the surrounding concrete, crews removed the boxed piles and filled the holes remaining with concrete. The design of the subway--for that is in effect what this structure is--reinforced the roof of the arch with steel I-beams placed at right angles to the axis of the new track below. With the new structure in place, crews then backfilled around the temporary trestle with earth fill, and the isolated section of new line awaited the completion of Tunnel 25 a short distance to the west.

III. SOURCES

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United States Geological Survey. Topographic map. Greenwood, Calif. quadrangle, 7.5' series, 1949 (photorevised 1973).

IV. PROJECT INFORMATION

As a result of the 1996 merger of the Union Pacific and Southern Pacific Railroads, a federal undertaking under the jurisdiction of the Surface Transportation Board of the U.S. Department of Transportation, and in order to accommodate freight trains utilizing longer and taller cars and loads--tri-level auto rack cars and cars carrying double-stacked containers, the Union Pacific will need to increase tunnel clearances on the former Southern Pacific Donner Pass Route. The tunnels, built between 1868 and 1925, are contributing elements of the National Register-eligible Southern Pacific Donner Pass Route Tunnels Historic District. All tunnels have been laser-measured and the railroad will determine clearance needs on a tunnel-by-tunnel basis. Some, because of curved alignment, will require interior work to allow for longer cars such as tri-level auto rack cars; others, including Tunnel 26, will require both interior and portal work to provide sufficient vertical clearance for "double-stack" container cars. The latter work may impact the character-defining tunnel portals if crown mining of the tunnels (as opposed to lowering the tunnel floors) is selected. Inasmuch as this would cause an adverse effect to the tunnels, Union Pacific has elected to record the tunnels for the Historic American Engineering Record. Documentation was carried out by P.S. Preservation Services, John Snyder Field Director and Historian, and Ed Andersen, Photographer. Photos were made in August 1997, and research was carried out from August 1997 through March 1998.